

4 *Medicine vol 10.4*
FRAUDS DETECTED:
OR,
CONSIDERATIONS
Offered to the
P U B L I C;

SHEWING THE
Necessity of some more effectual Provision

7 **AGAINST**
Deceits, Differences, and Incertainties,

IN
D R U G S,

AND
COMPOSITIONS OF MEDICINES:

Occasioned by the late

REFORMATION

OF THE

LONDON PHARMACOPOEIA. *

*Omnis cura eo tendit, ut bonum & utile ei,
Qui curatur afferat.*

Pl. de San.

L O N D O N:

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U. S. I. D.



INTRODUCTION.

THE President and College of Physicians, having with great Care, Pains, and Industry, revised, corrected, and reformed their Pharmacopæia *, or Book prescribing and directing the Manner of preparing all Sorts of Medicines, &c. and having lately published the said Book.

And His Majesty having thought fit, by and with the Advice of his Privy-Council, to enforce the Observance of it, by the Publication of an Order, prefixed to the said Book, requiring, charging, and commanding all and singular Apothecaries, and others, not to compound or make any Medicine, or Medicinal Receipt or Prescription, &c. in any other Manner or Form than is directed by the said Book.

And farther, as the Establishing the general Use of this Book, is intended to prevent all Deceits, Differences, and Incertainties, in the making or compounding of Medicines, in which the Lives and Healths of his Majesty's Subjects, are so highly concerned.

* Commonly called the Dispensatory.

It is certainly the Duty of every honest Apothecary, and of every honest and good Subject concerned in the making or compounding of Medicines, strictly to conform himself to the Directions contained in it, both as to the Materials, as well as the Manner and Form of making and compounding them.

The Physicians had Reason sufficient for soliciting and procuring this Order of Council, in as much as their Reputations, and the Success of their Practice, depend upon the faithful Composition and Goodness of the Medicines they direct; and I heartily wish it might be able to answer their Purpose, and that all People would pay Obedience to it: But if we may form a Judgment of what is likely to happen, from what has been the Case in Times past, I fear they will need some stronger Security against the *Deceits, Differences, and Incertainties*, they have so much Cause to be apprehensive of.

But what is of higher Consequence, is, that *the Lives and Healths of his Majesty's Subjects are concerned in it*: And therefore the Public, that is to say, every Person, who values his own Life; every one who has a Husband or Wife, a Father or Mother, a Child or a Friend to be concerned for, have an indisputable Claim to the strongest Security they can obtain, that they are not deceived or abused by the Administration of *Miscompounded, Altered, or Adulterated Medicines*.

There are three Sorts of Compounded Medicines of the greatest Consequence in their Operations, as to the Life, the Strength, the Health,

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Health, and the Ease of the Body, I mean *Opiates*, *Purgatives*, and *Mercurials*; and, therefore, the greatest Accuracy and Care are required in preparing them; that the Strength of them may be known, and rightly proportioned by the Prescriber. This is a Point of the greatest Moment; and I am led to mention these first, in Regard to the Frequency of their Administration; their more immediate and sensible Operations, and the great Changes they so visibly produce on the human Body: Not but that others demand equal Care and Fidelity with these; whose Virtues and Effects, though more slow, or less discernible to the Patient or By-standers, are in general, as certain, and as much to be depended upon by the Physician.

For the Sake of the Public, therefore, there ought to be some strict Obligation upon all Compounders of Dispensatory Medicines, that they do not depart from the Rule laid down to them: An Obligation, which shall effectually restrain them, either from *Adulterating*, for the Purpose of Cheapness; or *Varying thro' any ill-grounded Conceit*, the Medicines they are directed to prepare for public Use.

But farther, As all compounded Medicines owe their Efficacy to the Simples, which enter into their Composition; and also as many of these Simples are frequently prescribed alone*, and great Stress laid upon them, in the Attempts to recover Persons from dangerous and painful Distempers, it is

* Such are Opium, Rhubarb, Jallap, Ipecacuanna, Bark, &c.

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of the utmost Importance ; and both Physicians and Patients are nearly interested, to have a proper Security, that such only shall be used, which are genuine, and in the greatest Perfection.

Could it be presumed, that all Compounders and Sellers of Medicines had been faithful and careful in Times past, there would be no Reason for the Publication of these Papers, or for the Requiring better Securities to the Public, than it has hitherto had. But it is too well known, this has not been the Case. For, notwithstanding Royal Proclamations, and Powers of Visitation, heretofore published and granted, there have been frequent Detections of *bad Ingredients* used, and of *many Deceits and Differences* in the Compositions of Medicines prescribed in former Pharmacopæias ; nor have the Powers hitherto granted, been sufficient in themselves, or sufficiently authorized to prevent the Evil, or to reach all the Persons concerned in practising it ; which will appear as well by the following Remarks on what has been actually practised upon the Compositions in the last Pharmacopæia, as from the frequent Complaints, made by the Writers on these Subjects.

I must first premise, that the Trade of Wholesale Medicine making, has of late Years more generally fallen into the Hands of Persons, who do not visit the sick, who have no Knowledge of the Application or Use of Medicines ; whose Reputations are but very remotely concerned in the Success of them ; and who not being Eye-witnesses to the ill Effects

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Effects produced by the Administration of bad ones, cannot be supposed to suffer much Uneasiness from such Considerations.

Multitudes of Druggists and Chymists now fill the different Quarters of the Town. It is these, who ride the Countries, either themselves, or their Emissaries, and supply the Apothecaries, and others, over the greatest Part of his Majesty's Dominions. Numbers, if not almost all the little Shops near *London*, are furnished from them: Nay, there are not many Apothecaries in Town, who, at Times, may not be under a Necessity of applying to these People for Things they may happen to be out of. So that there is not a Gentleman, or poor Person, in Town or Country, who may not be obliged, at one Time or other, to swallow down their Compositions, such as they happen to be: Nor is it infrequent, to hear Gentlemen complain of the Difficulties they lie under, when in the Country, on this Head.

Vast Quantities are sent Abroad to our Settlements and Factories; and there have not been wanting famous Instances of the pernicious Effects of bad Drugs and Medicines, upon our People, in some of those Places, labouring under dangerous, epidemic, and as it proved, fatal Diseases. When one considers the Unhealthiness of some of those Climates and Countries, they are obliged to visit or reside in; the Sicknesses which prevail there, and the Multitudes of our Countrymen who have been swept off by them, it will afford a powerful Argument to all thinking and humane Persons; all who have any
Regard

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Regard for our Colonies, our Navy, our Army, our Mercantile Seamen, our whole Community, why this Affair ought carefully to be looked into, and provided for.

I am far from designing to charge all Druggists, Chymists, or others, with Miscompounding, Falsifying, or Adulterating their Medicines. I do not doubt, but there may be very just and faithful Men amongst them. I have the greatest Reason to believe, from what I know and have heard, that our Navy is well served; that the Army was never better, if so well furnished with perfect Drugs and Medicines of all Kinds. Therefore my Observations cannot in the least affect such as these, and are meant only of others void of this Integrity, who to force a Trade, to undersell their numerous Competitors, and find a living *per fas aut nefas*, in vending large Quantities of Drugs and Medicines, contrive only how to make the last cheap and fair to Appearance; and to dispose of the former to ignorant People, either in the Condition they are, *or in Medicinal Compositions, where all their Imperfections are pretty sure to be concealed.*

I have been credibly informed, that some Years since, when the Physicians had obtained a Bill for the Confirmation and Extending of their Power for three Years, many People were thrown into such a Pannic, from the Dread of a thorough Visitation, as made them to lay down this Part of their Trade; but that when the said Physicians proved unsuccessful in their Application to Parliament for a Renewal or Perpetuity of this Act; and the

the Fears of being visited were removed; they immediately resumed their old Traffic, and have continued it ever since, though, as may be presumed from what follows, not much to the Health of the People, or to the Advantage of the fair Trader.

Of DRUGS, &c.

IT is a Thing much to be lamented, that we receive so few Drugs from Abroad pure and genuine, or fit to be used in the Condition they come.

At the very best, they almost all come the good and bad Sorts together; so that great Integrity, and Care, as well as Judgment, are required to chuse and separate one from another.

Many of them are so mixed up with Straws, Sticks, Leaves, Seeds, Stones, and Dirt, through Carelesness, or Fraud, hereby to increase their Weight, as to demand both Time and Pains to separate and strain them. But it has been too general a Practice, as I have been informed, in Order to save the Labour and Expence of so doing; *to beat them into the most Capital Compositions* *, with the other Ingredients unpicked, and with all their Dross about them. Nay, what is worse, sometimes

* Such as Venice-Treacle, Mithridate, Diacordium, &c.

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to beat in Nothing but the Dross left after Straining, just to flavour the Medicine with the little Remains of the true Drug sticking to it. Those Drugs, I here refer to, are the Gums and Inspissated Juices, particularly *Opium*, *Galbanum*, *Ammoniacum*, *Opoponux*, *Sagapenum*, and *Asafetida*.

Sometimes they send from Abroad one Thing for another *. Oftentimes the whole Appearance is a Cheat, a made-up Composition, as in the *Castor Pods*, *Scammony*, *Balsam of Tolu*, *Peru*, &c.

At other Times, they are in a damaged or perishing State, particularly the *Rhubarb*, *Bark*, *Jalap*, *Cantharides*, &c.

And various are the Artifices of trimming the Surfaces of several, and powdering and colouring them over with the Dust of the same Drug, but in a more perfect State, in Order to give them a specious Outside, and render them saleable.

DRUGS WHEN POWDERED, may deceive pretty good Judges, much more those less conversant with them; and under this Form great Quantities are vended. Nor has it been uncommon, as I have been told, to pick out the indifferent Pieces, and to take the crum-

* A Discovery has been made within a few Weeks past of a very pernicious Root, mixed with the *GENTIAN*, which has endangered the Lives of several Persons using it for *Gentian* in their Bitters; throwing them into a Delirium, Stupor, and Insensibility. I thought it necessary just to give this Hint, as a Caution to all Apothecaries, to be careful in examining what they take into their Shops, and use for *Gentian*. A more particular Account of this Discovery, will, as I am informed, be soon made public.

bled Fragments and Siftings, and powder them all together; and unless they were quite perished before, they pass off tolerably well this Way, particularly *Rhubarb*, *Bark*, *Myrrh*, *Jalap*, &c.

The same Thing may be remarked as to ELECTUARIES, where any of these Powders are ordered to be mixed in, and made up with Syrup, in which Form it is next to impossible to detect them when bad. I doubt not but many *Prescriptions of the Bark* in this Form, have been discredited, and the poor Patient has languished under a tedious Intermittent, from no other Cause but the bad Condition of this most useful Drug.

As it is a customary Thing with many People, for the Sake of Cheapness, to carry their Receipts to be made up at the first noted Shop in their Way, they ought to be very careful that they have a fair Person to deal with, so as not to be cheated of their Money, and their Health into the Bargain.

The dead useless *Residuum* left in making the true *Resin of Jalap*, powdered with a little of the fresh Root, is often sold for the genuine POWDER OF JALAP.

The SALT of AMBER, a most useful Preparation, is counterfeited by powdering the Sal-Armoniac, and then giving it the Colour, Smell, and Taste of the true Salt, by rubbing a little of the Oil of Amber with it.

The CHYMICAL OILS, of very great Efficacy, when genuine, are adulterated with various Mixtures of Spirits of Wine, Oil of Almonds, Oil of Turpentine, &c, and require

no little Skill in the several Methods of trying them, to detect the Imposition.

It is to be feared there are many small Apothecaries, who are so little skilled in any Part of Natural History, as not to know the proper Species of such Plants, as are the Produce of their own Nation, which they should use, much less the distinguishing Marks of Foreign Drugs, either as to their Sorts or Goodness.

The Merchant receives them from Abroad, and when he gets them into his Warehouse, he has no other Way to dispose of them (I mean such, as are not exported again) such as they are, but to the Druggist; nor this last but to the Apothecaries, or into his own Compositions, or to his Shop Customers: And it is pretty certain, they do most of them go off, some how or other this Way: At least, I do not remember often to have heard of any of them, who, out of Principle or Conscience, destroyed any bad Commodity. I believe it is not the general Custom.

This being premised as to *Simple Ingredients*: I shall now produce some Instances of the *Incertainties and Deceits*, which used to be practised upon the *Compositions* directed in the former Pharmacopæia.

It is long since that I received the first Hints of these bad Practices, and it has been a Matter of great Concern to me ever since. I have taken great Pains to come at all the Information I could get in it. The Particulars I shall take Notice of, I either have
been

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been permitted to transcribe from private Receipts, or have had communicated to me, by Persons I could depend upon; some themselves concerned, and who lamented the Necessity they saw themselves under of doing it. I do not pretend to say, I shall be able to enumerate all the frugal and artificial Methods, used in this lucrative Mystery: As I never had any Interest to serve, which could induce me to study them, it is impossible I should; but those I shall enumerate will be more than sufficient to shew the Necessity of some effectual Methods, to prevent them for the future.

As the Pharmacopœia, I refer to (published by the College, 1720) proceeds in an Alphabetical Order, I shall conduct my Remarks in the same Manner.

Of the Incertainties and Deceits in COMPOSITIONS.

THE ÆTHIOPS MINERAL, or *Black Powder*, as directed, should consist of equal Parts of *Quicksilver* and *Sulphur*; but, as it was much cheaper to put in two Thirds of the latter, and not easy to be discovered when prepared, (for the Medicine will be made black with even less than this Quantity) this was too generally done; by which means the Buyer was deceived, and the Medicine in every Dose taken, of less Use and Efficacy; and differed in its Quality, in Proportion as

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the *Brimstone* took Place of, and differed from the *Mercury*.

The next Thing I shall take Notice of, are the CORDIAL WATERS; and I shall first remark upon their common Method, in all, of putting in a high rectified Spirit into the Still, with the Ingredients and drawing only the same Spirit off, lowering it down somewhat afterwards, with common Water; which Procedure was absolutely repugnant to the Rule prescribed them, (*viz.* to put in Brandy, and draw it lower in most Instances, than Proof Spirits) and by which the Waters were deprived of many of the most Medicinal Parts of the Ingredients; it being well known, that many of them will not yield all their most useful Qualities to the Spirit, but will be set free, and rise, chiefly with the Feints or Flegm, which comes off towards the last. This was particularly true in Respect to the HYSTERICK, PLAGUE, CAMOMILE, PÆONY, HORSE-RADISH, and DR. STEPHENS'S WATERS. Their avowed Pretence for this, was thereby to make it more transparent and limpid, which is never a Criterion of the Goodness of a Water, which ought to be something thick and milky. But, by this Means also, they had the Opportunity to defraud these Waters of Part of the Spicy Ingredients ordered in them; for the Relish of a strong Dram, sweetened with a little Sugar (commonly added) made the Abatement of the Spices less perceptible to the Taste: And, moreover, by giving a more specious Appearance to the Medicine, they could delude the unskilful Buyer into a false Opinion of its superior

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superior Excellence, to the Injury of the fair Trader, who made a Conscience of preparing it, according to the Rule laid down.

I have seen a private Receipt, by which CINNAMON WATER was made, and defrauded of two Thirds of the *Cinnamon*; so that, instead of a truly cordial, aromatic Medicine, you had only an inflammatory and coagulating Spirit.

Moreover, the *Cassia of Malabar and Java*, was frequently used in this, and all the other Compositions, where the true *Ceylon Cinnamon* is directed; which, though it has some general Flavour of the *Cinnamon*, enough to counterfeit its Appearance, yet is as inferior, in Fragrancy, Spicyness, and Pungency, and indeed in every useful Quality, as it is cheaper in Price. Great Care should be taken by all Compounders, that they are not imposed on, in buying *Cassia* for *Cinnamon*, which they will be often liable to, if they are not skilful and cautious to examine it.

In the AQUA MIRABILIS, *Jamaica Pepper* was the common cheap Substitute, for the *Cloves, Mace, and Nutmegs*; and not only in this Water, but in the others also, where Spices are directed: Giving hereby an acrid stimulating Quality to the Remedies, instead of that producing a gentle Warmth, and kindly reviving Irritation, such as the Spices are experienced to occasion.

The BLACK CHERRY WATER, instead of being prepared from the *Black Cherries*, was too frequently drawn off from *Almond Cakes*, after the Oil had been expressed from them; or, which is worse, from the *Laurel-leaves*, which

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which has been discovered to be a Poison of extraordinary Violence.

LUCATELLUS BALSAM. The common Method of debasing this, was by sinking Part of the *Wax* ordered, which was the dearest Article in the Composition, and a very material one for all the Uses it was designed to have; and which was therefore defrauded and injured in Proportion to the Omission. I have known between a fifth and sixth Part substituted, by those who had some Conscience left, instead of a full fourth; for I have good Reason to apprehend, that this Proportion was not allowed in common. Some who put in *Resin* in its Place, acted still much worse, by giving it an inflaming, sticky, and digestive Quality, very pernicious in those Breaches and Excoriations, upon the tender Coats of the Bowels, which require the most soft and healing Applications.

I shall introduce here (though out of the Order I proposed to observe) the BASILICON OINTMENT, because it was treated in the same unfair Manner, by being allowed a sixth only, instead of a fourth Part of *Wax*; the *Pitch* and *Resin* being increased in Proportion, which does the same Mischief in external, as the former in internal Applications.

CALOMEL, in Regard to its great Efficacy and frequent Use, especially in the Cases of weakly People and Children, whose Constitutions are greatly endangered by the Administration of rough Medicines, and more especially Mercurial ones, ought to be prepared in the most faithful Manner. The Pharmacopæia directs that this Medicine should be
pre-

prepared by four Sublimations or more: Six is the Number made Use of, by the most skilful and faithful People; and this is done in Order to break and comminute the corrosive Salts, which stick in the Globules of the Mercury, and thereby render them more safe and easy when taken into the Stomach and Bowels. But as these repeated Operations take up Time, and occasion a greater Expence of Fire; one or two Sublimations have been generally thought sufficient for the Seller's Purpose, though to the great Hazard of the Patient, whose Bowels are racked and tore by the Vellications of this harsh and hazardous Medicine. Nor can the Difference of this from the true Preparation, be well discovered by any of the outward Senses.

The RAWLEIGHS CONFECTION has had the Reputation of being thought a very rich and cordial Composition, and to be of eminent Service in a great Variety of Cases when carefully and faithfully prepared. But being a tedious and costly Preparation, there has been none more liable to *Incertainties* and *Deceits*, than this was. For, *first*, It was too common a Practice to leave out the *Spices* in whole or in part, which deprived the Medicine of some of its warmest and most reviving Parts. *Secondly*, It was customary to load the Tincture with the herby and other cheap Ingredients; nay to make watery Infusions, hereby to increase the Quantity of Extract, and thus deadening the Force of the Medicine. *Thirdly*, To save Labour and Expence of Fire, though contrary to the Directions of the Book, they omitted to make the
fixed

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fixed Salt, which was then considered as a proper Solvent of the Resinose Parts of the Medicine; and as a Menstruum to unite the oily ones with the rest, and render the whole Saponaceous. *Fourthly*, Another Method of debasing it, was, by doubling the Quantity of the dry Species, which lessened the cordial Quality by one half, or more, of every Dose prescribed or taken.

Nothing can more shew the Necessity of some effectual Method to oblige Persons to Fidelity, than the Consideration that all these Abuses may be committed, in the making of this one Medicine; and yet it is scarce possible to be certain in the Discovery of them, though they should all be practised.

In the DIACASSIA WITH MANNA, not only the *Syrup of Violets* was left out, but the Proportion of the *Sugar* was double the Quantity prescribed: The *Cassia*, from which the Medicine derives, chiefly, its mild, cooling, solutive Quality being diminished, to make Way for this cheaper Ingredient.

In all the PLASTERS, it was a general Method to put in *Lard* instead of *Oil*, and even not the best Kind of that (unless where Whiteness of Colour distinguished the *Plaster*) but a saline, uncleansed Sort, very unfriendly oftentimes, and troublesome to the Skin, exciting inflammatory Heats and Eruptions, in Cases where the Plaster is applied to serve, only as lenient Defensitives, or to keep the other necessary Dressings in their Places.

In the DIACHYLON WITH GUMS, and in the PARACELSUS, the *Burgundy Pitch* was too commonly substituted, at least in Part, for

for the warm attenuating *Gums*, by which Practice, the double Faculty the Plasters should be indued with, either to resolve, or ripen Tumors, as Nature is disposed, was converted into one only, *viz.* that of forcing a Suppuration, by their viscoſe, cloſe Adheſion; by ſtopping all Perſpiration, by loading the Part with the detained Humours, and cauſing a more violent Attrition among them; without communicating any ſubtile active Particles to diſſolve their Tenacity, and to open a Paſſage for them back into the Veſſels.

The Greenneſs given to the MELILOTE by *Verdigreafe*, inſtead of the Herb, was of ſuch ill Conſequence, giving ſuch intolerable Pain by its corroſive and inflammatory Quality, that I think I need not enlarge upon the Wickedneſs of this Adulteration, ſometimes put in Practice, though I hope not often: But there is another almoſt as bad Method, which I am ſure has been, I mean that of increaſing the Proportion of the *Reſin*, and leſſening that of the *Wax*. I have a Receipt of an eminent Shop, now in my Hands, according to which, the *Wax* is to the *Reſin*, only as 4 to 15, whereas it ought to be as 4 to 8. The frequent Uſe of this Plaster in dreſſing of Blifters, has ſhewn it to be but an uneaſy Application at the beſt, and it had too much of the ſticking Quality before in it, for this Purpoſe, and therefore muſt have been rendered ſtill worſe for every Addition of this Kind; and many a tender Back has ſmarted ſorely for it.

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I come now to the *CARYOCOSTINUM*, where the noted *Pimento* or *Jamaica Pepper* entered again as a Substitute for the *Clove Spice*.

The *LENITIVE ELECTUARY* was made in a much more compendious and cheap Manner than the Rule warranted, *viz.* by boiling up a thick Syrup of brown Sugar; then adding the less expensive Pulps of *Tamarinds* and *Damsons* (instead of *Prunes*) with sometimes, when cheap, a small Portion of *Cassia*; and finishing the whole with the *Sena* and *Coriander*. I have been indeed told, that this answered the Purpose of the Medicine very well: But though we should take their Word for this, yet, as it is a Deviation from Integrity in the Compounder, and a Delusion of the Buyer, it ought by no means to be allowed of.

The three Capital Electuaries, *viz.* *DIASCORDIUM*, *MITHRIDATE*, and *VENICE TREACLE*, as there are great Quantities continually sold of them, were subjected to all the saving Artifices, that a fraudulent Invention could furnish. The *Spices*, dear *Gums*, and other *costly Drugs* were left out in whole, or in part; or when added, were put in, the one unstrained, and with all their droffy Parts; the others, in bad Condition, ungargled, and unpicked. I have tasted *Venice Treacle*, in which, no Warmth or Spicyness could be perceived, but what was owing to Pepper and Ginger, nor indeed any other prevailing Taste. Upon my asking once a Wholesale Dealer, how he could manage it to afford this Medicine, at a certain Price, he told

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told me, he sometimes sold it for ; when I had been assured it would cost more, if faithfully prepared ? He frankly answered me, that he had rather always sell it genuine ; but that as there were some of his Country Chaps, who would have it at that Price, and constantly wrote for it ; his Method was to let it down with clarified Honey, in the Proportion of one Pound to two of the Electuary ; and that it was impossible for any one to discover it. The same he did by the other two Electuaries also, when the same Necessity of retaining a Customer obliged him ; for they used to alledge, that others had been and offered them at that Price, and therefore they would give no more for them. Farther, with Respect to the *Opium* in these Medicines, every Dose of which Medicines is directed with a View to an ascertained Quantity of *Opium* in each, and the good Effects proposed by the Prescriber, depending greatly upon Certainty herein ; there has been great Omission and Neglect, as well as Abuse in this Particular, by beating it in, dried and decayed, and with all its Filth and other extraneous Bodies, as it comes from Abroad, with the other Ingredients ; instead of separating these Things by Solution and Straining, and then putting in the Quantity of pure *Opium*, according to Direction. In short, the Ways of Adulterating these Capital Compositions, are so various, that although they are every Day prescribed, the Physician can be at no Sort of Certainty what he gives, or what he can depend upon.

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When one considers in what a great Variety of Cases, all these Medicines are necessary, *viz.* in Colds, Fevers, Fluxes, and other numerous Disorders of the Head, Stomach, and Bowels; how nearly the Health, Ease, and Safety of the Patient are concerned in their being faithfully prepared; I think there needs no other Argument to shew how extremely culpable the Conduct I have mentioned, is; nor how necessary it is become to make some effectual Provision for the future, against the Frauds of the Seller, the sordid Avarice of some Buyers, and the Mischiefs likely to be occasioned to all Takers of them.

The ELIXIR PROPRIETATIS, according to the Receipt of a Shop of very great Trade, a Copy of which, I now have before me, instead of containing the *Myrrh*, *Aloes*, and *Saffron* in equal Portions, as directed, is allowed only two Parts of *Saffron* to twelve of the other two, which, in making a Gallon, at a Time when *Saffron* is dear, may put near twenty Shillings in the Compounder's Pocket, and the Theft not be easily detected. A powerful Temptation to an avaricious Trader!

The ELIXIR of *Vitriol* is subjected to a Variety of Substitutes, in the Room of its Spices.

The LIQUID LAUDANUM has been used also to be robbed of Part of its *Saffron*; and I have Reason to believe, of its *Opium* too.

The next Instance of Fraud I shall take Notice of, and which deserved the severest Censure, was that of depriving the PILLS COCHLÆ MINORES and DE DUOBUS, of half the

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the Quantity of the Oil of Cloves prescribed, which I once had an Opportunity of discovering myself, at the Time of compounding one of them, and by a Sight of the standing Receipts for both. Moreover, I had sufficient Reason to suspect, that even what was put in, was not genuine, but an adulterated Mixture with common Oil. Both these Pills having *Coloquintida* in them, it was on the Account of this harsh Drug, that the aforesaid warm aromatick Oil was thought absolutely necessary, to prevent those intolerable Twinges and Spasms, which it is otherwise apt to occasion in the Guts, and which, when they are permanent, endanger a total Stoppage and Inversion.

The Species *Hiera*, or *HIERA PICRA*, had a Place given it in the *greater Pil Cockia*. This Species was used to be adulterated by leaving out the *Cinnamon*, *Spicnard*, and Part of the *Saffron*; and substituting *Pepper* and *Ginger* in their Room; as also, by using a coarser and more nauseous *Aloes*, instead of the milder and less offensive, though much dearer *Socotrine* Sort. The Abuse every Day committed, in compounding this *Hiera Picra*, is become so gross and palpable, that many do not so much as endeavour to save Appearances: And it looks as if the Commonness of this Abuse, was the only Reason why the Buyer is patient under such perpetual Imposition: For though there is scarcely a Composition, which lies more open to Inspection, viz. by its Fragrancy, aromatick bitter Taste, and by its bright and beautiful yellow Colour, when truly prepared; yet, it is too common

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common among many Wholesale Venders of Drugs and Medicines in Town, to put off upon their Customers, a dirty brown Powder, coarsely sifted, odiously bitter, biting, instead of being aromattick, and utterly destitute of all Delicacy, either to the Smell or Taste.

The Method used with the ECPHRACTIC PIL, was to lessen the Quantity of the *Rhubarb*; and to put in the *Hiera Picra* in the Place of the *Spicy Extract*.

The same compendious Method of putting together the Powders of the Ingredients, instead of making an Extract, was used in the PIL. RUDII, adding a little adulterated Oil of Cloves, to represent the Spices directed in it.

In the PIL. GUMMOSA, the *Sagapenum* was totally omitted, the *Opoponax* in small Proportion; the *Ammoniacum* and *Galbanum* supplying their Places.

But among all the Instances of Imposition I have yet mentioned, I think there is none exceeds that used in counterfeiting the celebrated GASCONS POWDER. One of the distinguishing Notes of this Medicine is the peculiar greenness of its Colour, depending when true, intirely upon the *Bezoar Stone*; but by the help of a little *Spinach Juice*, or, as I have been told, sometimes of *Ox Gall*, they have learned so well to counterfeit it, as requires a very nice Inspection and Comparison, to find out the Difference. By Means of this Artifice, I once saw an Ounce of very fine *Gascons Powder* to Appearance, sold by a Druggist for one Shilling, at a Time when

Bezoar

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Bezoar Stone bore such a Price, as to make every Ounce of the Composition stand the fair Artist in near nine Shillings: And even upon this one Shilling, there was an exorbitant Profit made; for the Person who sold it, frankly hinted to me, that he believed, (except the Colour, which was then a Secret) there was no other Material used but the *Crabs Claws*, or, what was meaner, the common *Clay of the Pipe-makers*. This Preparation is hauked about the Town, and sold to the Shops, by dirty Fellows, who make a Livelihood of it. When this comes out of the wholesale Shops, into the Hands of Retailers, and is sold so low as one Farthing *per Grain*, which equals ten Shillings the Troy Ounce, what a monstrous Advantage is here made? But when made into Bolusses or Draughts by the practising People, it exceeds all Imagination. Without entering into the Consideration of the Uses of this Medicine, when honestly prepared; this is so notorious a Cheat upon the Public, and such an Injury to the fair Trader, as ought by no Means, to be any longer endured.

In the *IAPIS CONTRAYERVA*, the Pearls were omitted, and the *Oyster-shell Powder* put in the Room of it.

The *SAL PRUNEL*, I have been told, is frequently adulterated with *Alom*, which, if true, is as wicked a Procedure, as almost any Thing in this Way can be; the *Alom* being of a Nature opposite to all the Intentions the Medicine can be given upon.

The *SPECIES DIAMBRÆ* was liable to the same Abuses, with the *Hiera Picra*, and all other

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other spicy Medicines, as being robbed of their best Ingredients, and debased with others of different Qualities.

The Spirits of SALVOLATILE, so much and so long in Request, is almost a different Medicine in every different Shop, and perhaps generally different from what the Rule directed. There is Room here also for much saving, and the only End now aimed at, seems to be to make it cheap, and smell agreeably.

The SPIRIT OF HARTSHORN is drawn from a Variety of Animal Substances, different from what it ought to be, *viz.* from *Urinous* Mixtures; from *common Bones* of any Kind; and from *Ivory Shavings*: I knew a Chymist, who never used, as he himself acknowledged to me, any other Material than the last mentioned, and who always sold it for the true Hartshorn Spirit.

There is not perhaps, any Remedy in more general Use than the DIACODIUM. A Remedy, which being an *Opiate*, ought to be prepared with great Care and Exactness; yet which is subject to such Difference of Strength, that an Ounce from one Shop shall equal in Virtue, two from another; nay, three or four of that made by some: This does not only arise from the different Manners and Time of infusing or boiling the *Poppy Heads*; but I know a Shop where not above a fourth Part of the Heads prescribed were used, whither from Negligence, Conceit, saving of Trouble, or from what other Cause, I could not obtain sufficient Satisfaction about: I can only determine, that it is a bad Procedure, from whate-

ver Cause it springs, and ought, if possible, to be prevented for the future.

The *Russia Castor* was directed to be used in making the TINCTURE OF CASTOR, as it is less foetid, more fragrant and reviving, and easier born upon the Stomach; but the *New England Sort* being much cheaper, was used in its Stead: This is much inferior in all the Instances mentioned, to the other. Besides this, it was not an uncommon Practice with frugal Managers, after the Tincture was extracted, to throw fresh Spirit upon the Residuum, give a little stronger Heat, and force out another grosser Tincture, hereby adding to the Quantity, while they debased the Purity and Elegancy of the Medicine.

In the TINCTURE OF RHUBARB, and in all other Compositions where this Drug has a Place, it was too frequent a Practice to pick out from the Heap all the bad *Rhubarb*, and hide it in them: A Practice too bad to need many Words to expose it, but so common as to need some effectual Restraint; it being a Drug so material in many Cases, that its being bad must greatly endanger the Safety of the Patient.

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I Have thus taken the Pains to collect some Instances of the more common Abuses, both as to *Drugs*, and in the *Compositions of Medicines*, as they have from Time to Time fallen under my Notice. I have been under

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a Necessity, sometimes, of speaking a little, of the Nature and Uses of these *Compositions*, when faithfully prepared, that I might thereby point out how much they are injured by such Adulterations. And this, I persuade myself, will have a proper Effect on some Persons, who, either, without any ill Design, may have fallen into this beaten Track, through Want of due Attention to such Considerations; or, at worst, from the Motive of being upon equal Terms with others, who feel no Check, wherever there is a View of Advantage.

Upon the whole, I believe every honest and considerate Man, will see from what has been remarked, how necessary it is, *for the Credit of the Physician, the Reputation of Pharmacy, and the Safety of the Publick*, that this unwarrantable and unjust Liberty of altering or debasing the prescribed Forms of Medicine, should be prevented by some effectual public Law for that Purpose.

My View has chiefly been to expose the more gross Adulterations practised in compounding; and I have therefore said but little with Respect to other Alterations, flowing from the Conceit of the Compounder; though these are now become so various and so numerous, as to stand in great Need of proper Correction.

The only Check which has been hitherto laid upon those unwarrantable Practices, has been the Powers granted to the *College of Physicians*, and to the *Company of Apothecaries*, of visiting the Shops, and inspecting the Medicines.

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In the 32d Year of H. VIII. *An Act of Parliament* passed, whereby the President and Community of Physicians were enabled to chuse four of their own Body, who, after being sworn, had full Power to enter into the Houses of Apothecaries, or others, using the Mystery of Apothecaries, to search, view, and see all Drugs, Apothecary Wares, and Stuffs; and, after calling to them the Wardens of the Mystery of Apothecaries, to burn, or otherwise destroy such as they found defective, corrupted, or not fit to be administered; and whoever refused to be searched, forfeited one-hundred Skillings.

In the 1st of Queen Mary, Another *Act* passed in Confirmation of the former, enacting among other Things, That, for the better Execution of the said Search and View, it might be lawful for the Wardens of the Grocers (or Apothecaries) to go with the said four Physicians, in their View and Search; and that every Person refusing to be searched, should forfeit ten Pounds: And, enacting also, that all Justices, Mayors, &c. should aid and assist the said Physicians, in the due Execution of the said *Act*.

These two Acts limited the Search to the City of London; but by another *Act* of his late Majesty (sometime since expired,) the Physicians were enabled to extend their Search to within seven Miles of the City and Suburbs, with an Exception of all Drugs, in the Houses or Warehouses of Merchants, Importers, or Drug-gists, not making or keeping Medicines for Sale: As also, of all Medicines, made in Virtue of Letters Patents. And providing, That in Case any one thinking himself injured, by the Judg-

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ment of the said four Censors, should desire to appeal from them to the Judgment of the College, he might have Liberty so to do.

These, I think, are all the Powers which have been granted by Acts of Parliament. And these undoubtedly have been serviceable, so far as they reached, and so long as they lasted; namely, to detect such bad Drugs, as the Owners of them thought fit to produce, *but were not sufficient to bring out those they had a Mind to conceal.* Much less can they be thought sufficient to come at a clear Discovery of the many practicable *Deceits and Differences* in Medicinal Compositions.

For Medicines, compounded of a Variety of Ingredients, may involve Secrets, *which none can reveal, but those who have wrapped them up together.* Not all the Senses combined in an Examination, though the Examiner be ever so acute or accurate, can discover many hidden *Deceits or Variations* in them. Bad Drugs may be put in; expensive ones omitted, and cheaper substituted in their Room; and yet the Medicine may retain the Appearance, and all the general sensible Qualities of the true Composition, in some Degree. For some Drugs have Tastes or Smells so prevalent, that even if half decayed, or if put in, in ever so small a Quantity, will be perceived through all. Others have some general Affinity in these Respects with many more; and thus may the Examiners Skill be eluded; or, at least his Judgment greatly perplexed, and his Determination uncertain. Nor is it at all to be doubted, but that Impositions of this Sort, have very frequently passed undiscovered and uncensured.

And

And it is very likely, that some Considerations of this Sort gave Occasion to the *Charter* granted the Physicians, 15 *James I*, which after reciting, That *notwithstanding former Grants and Acts, divers Enormities did abound, through the Unskilfulness, Fraud, and Deceit of Apothecaries, Druggists, &c.* They were granted full Power, &c. to examine, survey, &c. *Apothecaries, Druggists, Preparers of Chymical Medicines, &c.* To examine all such Persons UPON OATH, concerning the Receipts and Compositions of their Medicines; and then to take, burn, or destroy such as they found defective or bad. It was also granted them, to summon any such before them, to fine them for Non-appearance: If they should appear, and it should be proved upon Examination, that they sold or kept any *Wares, Drugs, &c.* defective, or not meet to be administered; or did make, compound, or deliver any Medicine Simple or Compounded, differing from, and not agreeable in Name, Nature, and Quantity, unto the *Præscript* or Direction, that they should be fined three Pound for each Offence, and imprisoned till they paid it.

This Charter went indeed to the Bottom of the Evil, and reached to the several Sources, from whence it springs. It provided equally against the *Weakness*, as against the Dishonesty of the Compounder.

Nor is it to be doubted, but that great Mischiefs may arise, where there is no fraudulent Intention, from the self-sufficient Conceits of vain Men, who over-rating their small Abilities, or little Knowledge, and fancying to themselves some Improvements they can
make

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make upon the Plan laid down to them, take upon them the unjustifiable Liberty of omitting some Things, substituting others, altering the Proportions, and thus of making the Medicine, *to differ both in Nature and Quantity from the Præscript they should conform to.*

I say, it cannot be doubted, but that great Mischiefs may arise from hence, if it be considered, that all intelligent Practitioners, when they prescribe a compounded Remedy, prescribe it upon the Apprehension of certain Qualities or Powers resulting from the known Composition, and upon the Knowledge which Experience has furnished them with, of certain Effects and Alterations they are capable of producing in the Body. Whoever, therefore, takes upon him to alter that Composition, by Omissions, Substitutions, or varying the Proportions, runs the Risque of giving a different Quality, in Kind or Degree, and consequently of making it to produce different Effects from what are intended; which, if the Intention of the Prescriber be right, must be to the Detriment of the Patient.

But this Charter, had it been enforced by an Act of Parliament, and *executed impartially*, would have effectually provided for the Detection and Suppression both of *Frauds and Incertainties*; in as much as very few could have been supposed so weak or so wicked to persist in these unwarrantable Practices, when either frequent and complicated Perjuries must have been the Consequence of such Examinations; or the utter Loss of their Characters and Business, if they had been so honest as to acknowledge the Truth.

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In another Charter of 15 Charles II. all these Grants were renewed, with a Provision, That in Case any Person should think himself aggrieved, he might appeal to the Lord Chancellor, two Chief Justices, and Chief Baron.

The Apothecaries Company have also a Charter, which was granted the 13th of James I. which after reciting, *That many ignorant and unexperienced Men not instituted in the Art and Mystery of the Apothecaries, did make and compound very many false, unwholesome, hurtful, corrupt, and pernicious Medicines.— Grants them the Power of making Laws, &c. to respect all exercising and occupying the Art and Mystery of the Apothecaries, within the City of London, its Liberties and Suburbs, and within seven Miles of the same.— Granting also farther, That no Person should have, hold, or furnish an Apothecary's Shop, or exercise the said Art, Mystery, &c. without having first served an Apprenticeship with some Free Apothecary.— And lastly, Granting them the Power of entering the Workhouses and Shops of all Persons, using or exercising the said Art, within the City of London, its Liberties, Suburbs, and within seven Miles thereof; or wherever any simple or compounded Medicines, Wares, Drugs, &c. may be likely to be found.— And to burn all hurtful, false, adulterated, stale, corrupted, unwholesome Medicines, &c.*

It appears from what I have recited, that the Wisdom of our Legislature has at different Times, thought fit to entrust the Powers of Visitations, Searching, and destroying bad Drugs and Medicines, with the *Physicians and Apothecaries*, separately and jointly.

The Powers, which the College of Physicians

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at present have, are derived from the *Acts* of 32 H. VIII, and 1 of Queen Mary,— are limited chiefly to the City of *London*—to the Visitation of Apothecaries only. At least, it is doubtful, what Power they have to visit others.— They are confined to a *mere Inspection* of Drugs, Medicines, &c.— They can only judge upon outside Appearances, without being able to detect many of the numberless Fallacies, which may lie hid underneath; and consequently, whether they approve or censure, they must be directed for the greater Part, by uncertain Conjecture.

The Apothecaries have only a *Charter*, and consequently, no sufficient Powers to answer the End.

It may possibly be thought a difficult Matter to grant *sufficient Powers* to cure the Evil, and at the same Time to prevent *Partiality* and *unfair Dealings*, in the Execution of them.

It may be thought requisite to provide for some *equitable and expeditious Appeal*, upon an Apprehension such Circumstances may happen. These Considerations I shall leave to the better Judgment of my Superiors.

But I should think the more frequent the Visitations are, the better it would be; and, consequently, that these Visitations would be more frequent and effectual, if granted both to the College of Physicians, and Company of Apothecaries, than to either of them singly, and if these Visitors were sworn to an *impartial Discharge of their Duty*.

Lastly, I apprehend there can be no effectual Stop put to this growing Evil, until all *Compounders of Dispensatory Medicines for Sale*, whether
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Apothecaries, Druggists, Chymists, or others, of whatever Denomination, shall be subjected by Law to an Examination upon Oath; or at least, till the Servants of all such shall be subjected to such Examinations. This Method will bid fair for penetrating into all unlawful and mischievous Secrets, and for detecting and putting a Stop to the whole Iniquity.

Nor can it be well supposed, that any honest fair Man need have any uneasy Apprehensions from such a Law, or fear to stand the Test of the strictest Examination; especially if he can have an equitable, an easy and speedy Appeal. His Simples will speak for themselves. His Compositions will not be subjected to Condemnation, upon any wrong Judgment, fallacious Guess, or partial Censure of any Examiner. He will have the Opportunity of clearing up all Doubts about them. He will rejoice to have a fixed and certain Rule to govern himself by; and which all Persons, who may stand in any Competition with him for Business, will be indispensibly obliged to comply with, as well as himself. And he will hereby be put upon a level of Advantage with the dishonest fraudulent Interloper, who may have heretofore, by wicked Artifices, found means to undersell him, and to run away with a large and profitable Part of his Business. It will raise the Profession of Pharmacy into Credit, which Nothing can so much tend to ruin as Frauds and Deceits practised by those who carry it on. And therefore I should think it would redound to the Honour of the Company of Apothecaries, to apply to Parliament for an Act to this Purpose.

POSTSCRIPT.

SINCE the Writing of this Pamphlet, I find the Apothecaries are applying to Parliament, for a Redress to the Evil it was designed to expose. On which Occasion I think myself bound to declare, that I had wrote it long before I received any Notice of such a Design being on Foot; and intended to publish it about the same Time the *Pharmacopæia* came out. Nor has this any Connexion with their Proceedings; not having communicated either my Writing or Publishing it to any one of them; and being, as the Author of it, at this Time, an absolute Stranger to all of them. I do not know the Particulars of the Bill designed, any farther than what the Votes mention; and from some Reports which have come to my Ears. I apprehend that Difficulties will be found, Objections started, and perhaps a powerful Opposition, made by Persons, who may have an Interest so to do. But I hope, now the Thing is set on Foot, the Wisdom of Parliament, without Regard to the Artifices or Interests of any Set or Sets of Men, *the Petitioners or their Opponents*, will exert itself for the Good of the Public, and frame some equitable and effectual Law, to this most necessary and salutary Purpose.

F I N I S.

E R R A T A.

Page 8, l. 6, r. *Opoſonax*. P. 23, l. 26, r. *Lapis*.